

Research Notes: Effects of Collaborative Partnering on Major Capital Projects

Identify the collaborative partnering tools that have the greatest impact on successful major capital improvement projects.

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Program Steering Committee (PSC): Design/Construction

Project Title: Effects of Collaborative Partnering on Major Capital Projects

Project Number: P852

Task Title: Validating the Outcome of Partnering on Major Capital Projects

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WHAT IS THE NEED?

In recent years, the construction industry has moved away from the master builder concept to a highly diverse set of participants providing the special focused services necessary to design and build any major capital project. The resulting industry make up of highly specialized firms and narrowly defined roles and responsibilities has led to a fracturing of the capital project process, and a reliance on litigation to resolve the inevitable differences that occur with this approach. In present times, it is not at all unusual to find projects fraught with change orders, claims and lawsuits (in many cases before the project is even complete).

A process known as Collaborative Partnering provides a framework for communication and problem solving with the goal of win/win outcomes that ensures successful project delivery. However, there is significant debate as to which partnering activities actually contribute to these kinds of successful outcomes. There is a need to identify those specific processes embodied in collaborative partnering that have the strongest positive influence on project outcomes.

WHAT ARE WE DOING?

The researchers will first conduct a comprehensive literature review to outline the successful collaborative partnering efforts, best practices, and initiatives that have been incorporated around the nation (Task 1). Then the research team will focus on collecting and compiling project information on Caltrans capital projects completed between 2006 and 2012 and with project costs greater than \$10 million (capital cost), to include detailed overview of the data sources, the major variables collected, and any limitations and/or constraints associated with the Caltrans data that they may have uncovered (Task 2). After the data has been closely examined, cleaned and organized, the research team will perform statistical analysis to identify statistically significant relationships between the partnering

data and the project data. This process will allow the research team to identify partnering activities that have a strong positive correlation with successful project delivery (Task 3). In the final task the research team will identify the most effective tools and best practices that have the greatest impact on project performance, and will present them to Caltrans in an end-of-project presentation (task 4).

WHAT IS OUR GOAL?

The goal of this research is to identify successful Collaborative Partnering efforts or initiatives that are supported with outcome oriented data such as budget compliance, schedule compliance, safety compliance, claims mitigation and stakeholder satisfaction, and efforts to develop “best practice” guidance to serve as the basis of teaching practitioners how to incorporate it into their business practices to improve project delivery.

WHAT IS THE BENEFIT?

Caltrans recognizes that today’s projects must contend with a host of challenges never before seen with tightening environmental standards, more public scrutiny, and tighter budgets just to name a few. This changing environment requires updated guidelines that incorporate experience gained from recently completed projects as well as cutting edge project data analysis. The research described in this proposal will further Caltrans understanding of those specific processes embodied in collaborative partnering that have the strongest positive influence on project outcomes. Equipping project staff with this information and empowering them to apply it throughout the project phases will not only lead to better project delivery but also improve staff morale.

WHAT IS THE PROGRESS TO DATE?

This project was approved for funding in May 2013. Currently, the Caltrans project team and UCD research team are working on finalizing the scope of work and other contract documents. It is planned to submit the final contract package for processing to Caltrans Department of Procurement and Contracts by December 2013 for a project start of February 2014.